

4. FILE CODES, DEVICE NAMES AND DISK NUMBERS

4.1 File Codes & Device Names

In order to maintain flexibility DOS6800 processors, utilities and control commands refer to I/O devices by using a logical file code rather than a physical device name. The relationship between file codes and devices is indicated in a file code table maintained within the Monitor. The contents of this table can be altered by the user explicitly or implicitly by the use of control commands.

A file code is a hexadecimal number ranging from /1 to /EF. The / (oblique) indicates that this code is hexadecimal. This convention is used for all hexadecimal numbers which appear in this Manual. Note that there are the following exceptions to this rule:

/S	denotes a source file
/O	denotes an object file
/L	denotes a load file
/OB	denotes the object library
/OBJCT	denotes the object library

A device name comprises a unit type and unit address.

The unit type comprises two alphabetic characters. The unit address comprises two hexadecimal digits. The device names used in the file code table are shown below:

Unit Type	Unit Address	Description
CR	0D	Card reader
LP	0F	Line printer
MT	0C	Magnetic tape unit
TK	0E	Cassette unit 1
TK	1E	Cassette unit 2
TY	10	Console typewriter

Note that the file code table contains device names for peripheral devices (i.e. non-disk devices) only.

When a file code is assigned to a disk file, a disk-number is entered against the file code indicating the disk on which the file is held. There is a separate table of files maintained by the Monitor for each disk.

The initial contents of the file code table (i.e. at system start) are shown below:

File Code	Use	Device Name
/1	Response from CCI (S :)	TY10
/2	Print output	LP0F
/3	Cassette output	TK0E
/4	Not assigned	---
/5	Undefined	TY10
/6--/DF	Not assigned	---
/E0	Control command and Line Editor input	TY10
/E1	Source input	TK0E
/E2	Object input	TK0E
/E3	Not assigned	---
/E4	Magnetic tape I/O	MT0C
/E5	Card input	CR0D
/E6--/EE	Not assigned	---
/EF	Response from Supervisor following an interrupt (M :)	TY10

In this table certain file codes have been "assigned" to peripheral units; other file codes have not been assigned. Those file codes which have been assigned are known as "standard file codes". They are the file codes assumed by the CCI if the user does not specify a file code in certain control commands.

The user may explicitly assign a file code to a device by using the control command ASG. This command will override any previous assignment for the specified file code, including any assignment for a standard file code (see section 6.6 for examples).

The ASG command may only be used with file codes /1—/CF and /E0—/EF. In this range file codes /4, /6—/9, /E3 and /E6—/EE will normally not be used. /1—/3, /5, /E0—/E2, /E4, /E5 and /EF are standard file codes. The remaining file codes /A—/CF will normally be assigned by the user to any temporary disk files which are required.

File codes /D0—/DF are also "standard file codes". However, they are reserved exclusively for use by the System.

File codes /D0—/DF are assigned automatically by the CCI and by the processors, as a result of the user keying-in certain control commands. These file codes are assigned in the following way:

File Code	Use	Device
/D0	Catalogued procedure input	Disk
/D1—/D2	Not used	— —
/D3	Undefined	— —
/D4	/S file	Disk
/D5	/Ø file	Disk
/D6	/L file	Disk
/D7	System /ØBJCT file	Disk
/D8	User /ØBJCT file	Disk
/D9—/DF	Undefined	— —

File code /EE is the only other file code which is assigned automatically by the System. This file code is used by the CCI when processing a catalogued procedure invocation (see section 10.2). Although this file code may be assigned explicitly by the user, this should be avoided. The contents of any disk file with file code /EE will be lost whenever a catalogued procedure is invoked.

The way in which file codes are used is summarised in the following table.

Standard file codes assigned by the CCI and processors	Standard file codes pre-assigned in file code table	Spare file codes which are normally unused	File codes normally ASG to user disk files	File codes which may be assigned via the ASG command
[/1]
	/2			
	/3			
	/4			
	/5			
	/6			
	.			
	.			
	/9			
	/A			
	.			
	.			
	.			
	/CF			
	/D0			
	.			
	.			
	.			
	/DF]
	/E0			
	/E1			
	/E2			
	/E3			
	/E4			
	/E5			
	/E6			
	.			
	.			
	/EE			
	/EF			

4.2 Disk Numbers

Values /F0 to /F3 should not be used as file codes. These values are "disk numbers". They identify entire disks rather than individual files. The use of disk numbers /F0 and /F1 depend upon which disk was used to load the Monitor during system start. The disk selected on the SOP when the Monitor is loaded is designated /F0. The other disk on the same spindle is designated /F1. Disk numbers are used as follows:

Disk Number	Use	Device Name	Description
/F0	System disk	or vice { DK28	Fixed disk 1
/F1	User disk 1	versa { DK08	Cartridge disk 1
/F2	User disk 2	DK38	Fixed disk 2
/F3	User disk 3	DK18	Cartridge disk 2
/F8	User flexible disk 1	FL09	Flexible disk 0
/F9	User flexible disk 2	FL19	Flexible disk 1
/FA	User flexible disk 3	FL29	Flexible disk 2
/FB	User flexible disk 4	FL39	Flexible disk 3

Values /F4—/F7 and /FC—/FF are reserved for future use.